

**REMARKS/ARGUMENTS**

Claims 46-93 are pending. By this Amendment, claims 46-49, 65, 68-71, 91 and 92 are amended. Reconsideration in view of the above amendments and the following remarks is respectfully requested.

Claims 90 and 91 were rejected under 35 U.S.C. §101 as directed to non-statutory subject matter. By this Amendment, claims 90 and 91 have been amended so as to recite a computer readable storage medium tangibly storing software for executing the method of claim 46, and claim 65, respectively. Thus, the claimed invention is directed to a useful, concrete and tangible result.

Reconsideration and withdrawal of rejection are respectfully requested.

Claims 46-67 were objected to. By this Amendment, the Examiner's helpful suggestion has been adopted as base claim 46 is now directed to a computer implemented method.

Reconsideration and withdrawal of objection are respectfully requested.

Claims 65, 55, 89, 91 and 93 were rejected under 35 U.S.C. §102(e) over Bills et al. (U.S. Patent Application Publication No. 2003/0204479 A1). This rejection is respectfully traversed.

At the outset, it is noted that claim 55 was included within the rejection. However, claim 55 indirectly depends from claim 46, which was not rejected based on Bills et al. under 35 U.S.C. §102(e). Therefore, the rejection of claim 55 is believed to be inappropriate.

In regard to the rejection of claim 65, 89, 91 and 93, independent claim 65 has now been made dependent on claim 46, which was not rejected over Bills et al. under 35 U.S.C. §102(e). Therefore, the rejection appears to be moot.

Reconsideration and withdrawal of rejection are respectfully requested.

Claims 46-56, 62-64, 68-78, 84-88, 90 and 92 were rejected under 35 U.S.C. §103(a) over Tanaka et al. (U.S. Patent No. 6,665,735) in view of Bills et al. This rejection is respectfully traversed.

Claim 46 is directed to a computer implemented method of journaling in a database journal changes to system objects in an operating system with a processor. The method includes executing a dummy function in place of a system function when the system function is called, executing the system function under operation of the dummy function, and generating copies of system objects, changed by the execution of a system function, for journaling.

Claim 68 is directed to a system for journaling in a database journal changes to system objects including a processor adapted to execute a dummy function in place of a system function when the system function is called, wherein the dummy function executes the system function and generates copies of system objects resulting from the execution of the system function execution for journaling, and memory for use by the processor during execution.

The claimed subject matter provides significant advantage over the journaling prior art in that journaling changes are able to be made without being restrained to the journaling of particular objects, whereas the journaling prior art is focused on journaling system objects only for a portion of defined objects. The Examiner is referred to the Background to the Invention section of the application which provides a clear discussion of the problems with the prior art. From this prior art description, it is clear that the present disclosure provides a useful solution in the art of database journaling that was clearly not available prior to its inception, i.e., that of providing a general manner of creating journaling functionality without being restrained to particular defined objects.

Bills et al. does not teach or suggest this subject matter. Rather, Bills et al. teaches a method of recording data changes to objects. The method includes the steps of determining if there is an indication within the object that any changes to that object should not be stored in the object. If there is such a determination, then the changes are stored only in a journal entry in a journal. Therefore, Bills et al. is not concerned with storing objects after they have changed, but is solely concerned with avoiding storing those changed objects. This is clearly different than the invention recited in claims 46 and 68 wherein copies of system objects are changed by the execution of a system function, and those changed system objects are generated for journaling. Therefore, Bills et al. does not disclose generated copies of system objects, changed by the execution of the system function, for journaling.

The paragraph in Bills et al. that is referred to by the Examiner teaches that the journal file system (JFS) keeps a record of changes made to objects that are journaled. The JFS does not store objects after they have changed, but merely keeps a journal record of changes that were made, not the objects themselves.

Applicants appreciate the Examiner's implicit admission that Bills et al. does not disclose the execution of a dummy function in place of a system function when the system function is called, where the system function is then executed under operation of the dummy function. To make up for this deficiency, the Examiner asserts that the execution of a dummy function in place of a system function is taught in Tanaka et al. However, Tanaka et al. and Bills et al. are directed to mutually exclusive environments such that there is no motivation to combine their teachings absent the use of impermissible hindsight. Tanaka et al. lies within a completely different technical field that is wholly unrelated to the journaling in database journals to which claims 46 and 68 are now directed. Tanaka et al. teaches the solution in the art of linking and

compiling programming objects. Tanaka et al. is concerned with making changes to libraries and modules at a system level for the purposes of programming, whereas claims 46 and 68 are directed toward the journaling of system objects in database journaling. Moreover, there is no motivation or reason why one of ordinary skill in the art would have modified Tanaka et al. to include journaling changes to system objects or generating copies of system objects for journaling, as claimed in claims 46 and 68.

Further, claims 46 and 68 are directed to the execution of dummy functions as a replacement to whole system functions, which would be understood by the skilled person to be at a user level, rather than a system level (i.e., a kernel level) as described in Tanaka et al. Therefore, claims 46 and 68 are implemented at a higher functional level to that of Tanaka et al. which makes the combination of Tanaka et al. with the database journaling system wholly incompatible.

Reconsideration and withdrawal of rejection are respectfully requested.

Claims 57-59, 79-81 were rejected under 35 U.S.C. §103(a) over Tanaka et al. in view of Bills et al., and further in view of Owen (U.S. Patent Application Publication No. 2003/0217031). Further, claims 60, 61, 82 and 83 were rejected under 35 U.S.C. §103(a) over Tanaka et al. in view of Bills et al., and further in view of Suzuki (U.S. Patent No. 6,829,768). Finally, claim 67 was rejected under 35 U.S.C. §103(a) over Bills et al. in view of Cloud (U.S. Patent No. 6,253,369). These rejections are respectfully traversed as each depends from either claims 46 or 68, and are patentable by virtue of that dependency.

Reconsideration and withdrawal of the rejections are respectfully requested.

In view of the above amendments and remarks, Applicants respectfully submit that all the claims are patentable and that the entire application is in condition for allowance.

The Commissioner is hereby authorized to charge any deficiency, or credit any overpayment, in the fee(s) filed, or asserted to be filed, or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Account No. 14-1140 under Order No. PTB-4942-5.

Should the Examiner believe that anything further is desirable to place the application in better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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